



A  Sempra Energy utilitySM

SAN DIEGO REGIONAL
WATER QUALITY
CONTROL BOARD

2004 OCT 26 P 12:05

San Diego Gas & Electric
PO Box 129831
San Diego, CA 92112-9831

MAPM ✓
JPA 8-27-04
HN

October 25, 2004

File: SFH 400.330.232

Mr. John Robertus, Executive Officer
Attn: Industrial Compliance Unit
California Regional Water Quality Control Board, San Diego Region
9174 Sky Park Court, Suite 100
San Diego, Ca 92123-4340

Subject: **In Reply to IC: 13-0091.01 – Revised Tentative NPDES Permit Renewal
for Duke Energy South Bay, LLC, South Bay Power Plant,
Tentative Order No. R9-2004-0154, NPDES Permit No. CA0001368**

Dear Mr. Robertus:

On October 8, 2004, the San Diego Regional Water Quality Control Board distributed for review the revised tentative Order, "California Regional Water Quality Control Board, San Diego Region, Tentative Order No. R9-2004-0154, NPDES Permit No. Ca0001368, Waste Discharge Requirements for Duke Energy South Bay, LLC, South Bay Power Plant, San Diego County" (the "Tentative Order"). San Diego Gas & Electric (SDG&E) appreciates this opportunity to provide you the enclosed comments on the Tentative Order.

Background

SDG&E provides electrical service to approximately 1.3 million customers within San Diego County and southern Orange Counties. This service is provided pursuant to Public Utilities Commission regulation that requires the delivery of a safe, reliable and cost effective source of electricity. The South Bay Power Plant (SBPP) has been a crucial part of the local generation for SDG&E's service area since 1960 and currently all four units are classified as Reliability-Must-Run (RMR) units by the California Independent System Operator (CAISO). Although SBPP's four units are not economically competitive in the open market (as signified by the CAISO's "Condition 2" designation), the need for the units is critical until more generation is built locally to ensure the continuing reliability of SDG&E's electrical system.

Public health and safety concerns related to system reliability dictate the need to have other generation resources in place before SDG&E can remove its system's dependence on SBPP. Once that dependence goes away and the units are removed from their reliability status by the CAISO, the units by their inefficient nature will go away since they will no longer be able to recover their costs of operation. Under the current RMR agreement that Duke South Bay, LLC (Duke) has with the CAISO, **all costs incurred by the plant are passed directly to SDG&E's customers**. Neither Duke nor SDG&E absorb these costs.

Currently, SDG&E has a number of generation projects underway. In 2005, a new 49 megawatt (MW) peaker generation plant will come on line. By the summer of 2006, a new state-of-the-art 500+ MW combined cycle plant (which is currently under construction) will likewise become available. In addition, plans are underway to interconnect a new 500+ MW combined cycle merchant plant in 2007, which will be under contract to SDG&E. These three projects in themselves will significantly reduce the dependence on the older power plants, although whether they can, by themselves, completely eliminate the need for generation from SBPP will need to be determined by the CAISO.

SDG&E's purpose for commenting on the Tentative Order is to urge the Board to avoid permit conditions that either: 1) hamper the CAISO's ability to rely upon generation capacity from SBPP for maintaining SDG&E's electric system reliability; or 2) cause SBPP to incur unnecessary costs, all of which will be paid for by SDG&E's customers. SDG&E in no way is associated with the SBPP and is merely acting in a way so as to protect SDG&E's customers.

SDG&E is concerned that certain specific changes in the Tentative Order will lead to reduced available generation capacity from the plant and unnecessary costs to its customers. The following paragraphs contain a discussion of SDG&E's specific concerns and recommended solutions.

Temperature Compliance Point

The Tentative Order requires the discharge temperature limits to be complied with at Station S2. The October 8, 2004 Tentative Order revises the date on which compliance must be met at Station S2 from "no later than five years" to "no later than 36 months" from the adoption of the Order. Based upon analysis that SDG&E performed when it owned and operated the SBPP, the relocation of the temperature compliance point, as required by the Tentative Order, will result in a **significant** decrease in the available average generation capacity from the plant that could severely impact SDG&E's electric system reliability, especially while those units are under reliability status.

Although the workplan that Duke is required to develop by the Tentative Order requires the analysis of the financial and operational impacts of moving the monitoring point, the permit nevertheless requires the monitoring point to be moved in three years. This precludes the RWQCB at this time from fully considering the economic impacts of this new requirement, **including those potential impacts due to a loss of electrical reliability in SDG&E's service territory**, prior to the adoption of the permit, although Finding No. 28 of the Tentative Order asserts that the Board has considered those impacts in the process of adopting the Tentative Order. It would be short-sighted, especially from a public safety standpoint, to drastically limit the ability of one of the few major generation plants currently available to meet the reliability needs of the region prior to: 1) studying the impact on SDG&E's customers; and 2) determining if the relocation of the compliance point still allows the CAISO to ensure the lights stay on in San Diego and southern Orange County.

It is also interesting to note that while the proposed change is intended to improve the beneficial uses, the relocation of the monitoring point may actually have the opposite affect. When it becomes possible for the CAISO to remove some of the South Bay units from reliability status (which would have taken them out of service), the impact from moving the compliance point **may actually require the CAISO to retain additional units on line** in order to make up for the lost output from the other units. This is counter to the intended desire of most parties to have more units "go away" sooner. It is also important to understand

that retaining additional units longer than needed places millions of dollars of additional costs on the shoulders of SDG&E's customers.

This Tentative Order's proposed compliance schedule unfortunately does not allow for the further postponement of the relocation of the compliance point until some later date should the workplan study identify operational impacts to SDG&E's electric system reliability, including those that result in more units (not less) being retained in reliability status, or result in significant financial impacts to SDG&E's customers.

SDG&E recommends that the Tentative Order be revised to delete the requirement to relocate the temperature compliance point to S2 because it is not warranted. As stated in Finding No. 25 in Order 96-05¹, the beneficial uses to be protected in the discharge channel were determined to be those that have coexisted with the power plant's discharge since November 28, 1975. This finding was established during the extensive NPDES permit proceedings conducted between 1994 and 1996 and it was also determined that the beneficial uses in the channel were, in fact, being protected. Therefore, the relocation of the temperature compliance point to S2 is not required to protect the existing beneficial uses of south San Diego Bay, including the discharge channel.

Alternatively, if it is determined that the temperature compliance point cannot remain at S1 for reasons other than the protection of beneficial uses, the Tentative Order should be revised to require SBPP to conduct a study to determine what compensating increase to the temperature limits is necessary to relocate the compliance point closer to the plant while meeting the following conditions: 1) the selected location allows for representative monitoring; 2) the plant's ability to generate electricity is not negatively impacted; and 3) protection of beneficial uses is equivalent to that which currently exists with the compliance point at S1. A reopener provision should be included in the permit to incorporate the new compliance point and increased temperature limits once the study is complete.

SDG&E objects to the relocation of the temperature compliance point to S2, without a compensating increase in the plant's temperature limits. However, to the extent such a requirement is contemplated by the Board, it should only be required after a study has been conducted to evaluate the impacts of the relocation on the plant's ability to generate electricity, the resulting impact to SDG&E's electric system reliability, the costs to SDG&E's customers and the factors identified in Finding No. 28 of the Tentative Order. The Board needs to consider these issues **prior to** approving such a permit modification. The Tentative Order currently contains no findings that indicate these issues have been thoroughly evaluated.

In the event a final Board action requires the relocation of the temperature compliance point to S2, SDG&E recommends the compliance schedule be based upon the point in time that the units are no longer under CAISO reliability status. A reporting requirement could be included in the permit requiring an annual update of the plant's reliability status be provided to the Board.

¹ Order 96-05: "California Regional Water Quality Control Board, San Diego Region, Order 96-05, NPDES Permit CA0001368, Waste Discharge Requirements for San Diego Gas & Electric Company, South Bay Power Plant, San Diego County". November 14, 1996.

Copper Discharge Effluent Limit

The June 25, 2004 Tentative Order established new restrictive water quality based effluent limits for copper. The October 8, 2004 Tentative Order revises the proposed limits, provides a time schedule to comply with the new effluent limits, requires a workplan to be developed to describe the proposed plans for complying with the new limits, and establishes an interim effluent limit.

SDG&E recommends that because the actual discharge (or addition) of copper from the plant is so low (i.e., ~ 0.39ug/l) that the plant's on-going Best Management Program (BMP) (required by Provision 16 of Order No. 96-05 pursuant to 40 CFR 122 (k)(3)) and acute toxicity limits continue to be used in lieu of numerical effluent limits for copper (See Findings 24A and 47 in Order 96-05). This EPA approved compliance approach provides reasonable protection to the beneficial uses in San Diego Bay while maintaining control over the plant's discharge.

However, in the event it is determined that it is not legally possible to continue to utilize BMPs and acute toxicity limits in lieu of numerical effluent limits for copper, SDG&E proposes that the compliance schedule be extended to the end of the Order. By year-end 2007, it is anticipated that the CAISO will be able to better determine the further need for the units. Also by that time, SBPP could determine what operational measures, control measures, or mitigation options could be implemented to further minimize the discharge of copper should the need arise to operate units beyond the end of the Order. This proposed process would avoid potentially significant costs (e.g., for plant modifications) being paid unnecessarily by SDG&E's customers for any units that will be taken out of service over the life of this Order.

316b Compliance

The October 8, 2004 Tentative Order specifically requires SBPP to utilize a 20-year amortization period for determining the economics of various intake measures. It also reduces the time period for completing the Comprehensive Demonstration Study (CDS) required under the new 316b rules from "3 years, 180 days" to "30 months".

A 20-year amortization period is an unrealistic period to be used for a plant that is almost 45 years old and has a limited remaining life. The amortization period used should reflect the estimated remaining life left for each unit. SDG&E proposes the following revisions to the Tentative Order. First, require completion of the 316b study in the 30-month timeframe. Second, from 30-36 months from adoption of the Tentative Order, SBPP, the RWQCB, and the CAISO should work together to determine the remaining useful life of the units (upon which the amortization period should be based) and SBPP should complete the economic analysis portion of the CDS by the end of the 36-month timeframe. This will help ensure that a flawed economic analysis (i.e., because it is based upon an unrealistic amortization period) is not used that will only result in unwarranted costs being paid by SDG&E's customers. SDG&E recommends that the Tentative Order be revised to accommodate the above-proposed schedule.

Monitoring Requirements

The Tentative Order includes many changes to increase the frequency of the monitoring requirements, including requirements for monitoring toxicity, metals (both discharge and receiving water stations), and chlorine residual. These increases are unwarranted. Over the last five to eight years, the plant has ceased discharge of all in-plant wastewaters to San Diego Bay, significantly reduced the chlorine discharges, and implemented BMP programs to minimize the discharge of metals from the cooling water system. Also, years of monitoring data support the plant's compliance with its effluent limits. Although the potential risk from the plant has been reduced, the monitoring requirements in the Tentative Order (and therefore the costs of compliance) have risen significantly. These actions are inconsistent and the increased monitoring requirements will result in increased costs to SDG&E's customers that are unwarranted. SDG&E recommends that the increased monitoring requirements be removed from the permit.

Summary

SDG&E appreciates the opportunity to provide these comments to the Board. Again, SDG&E's sole involvement in this tentative Order is to protect the electrical reliability of its service territory and to ensure that its customers do not pay for unnecessary costs associated with maintaining that reliability.

If you have any questions regarding this amendment request, please contact me at (619) 990-4420.

Sincerely,

A handwritten signature in black ink, appearing to read 'Scott N. Peterson', with a long horizontal flourish extending to the right.

Scott N. Peterson, P.E.
Director, Electric Grid Operations
San Diego Gas & Electric